



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,152	04/16/2004	Ross Heggstad	2316.1828US01	8588

7590 08/11/2006

Steven C. Bruess
Merchant & Gould P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903

EXAMINER

RAHLL, JERRY T

ART UNIT	PAPER NUMBER
----------	--------------

2874

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/826,152

Applicant(s)

HEGGESTAD ET AL.

Examiner

Jerry T. Rahl

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings submitted on May 22, 2006 have been reviewed and determined to facilitate understanding of the invention. The objection of the Office Action mailed November 22, 2005 is hereby withdrawn and the drawings are accepted as submitted.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,556,738 to Pfeiffer et al. in view of U.S. Patent No. 6,263,136 to Jennings et al.

5. Regarding Claim 1, Pfeiffer et al. describes a fiber optic connection panel having a chassis (70) and a plurality of circuit modules (10) mounted in the chassis having an input port (110b) positioned on a rear face (94), an output port (110a) positioned on the rear face, two input

Art Unit: 2874

ports (106a, 106d) positioned on a front face (92), two output ports (106b, 106e) positioned on the front face, a monitor port (106c) positioned on the front face, two visual indicators (at right end in Figure 7) to indicate the state of the circuitry, positioned on the front face and a power input connector (202) on the rear face. Pfeiffer et al. describes each module having circuitry linking the input and output ports on the rear face to each other and to the output ports on the front face, where two normal through paths each link on the rear input ports to one of the rear outputs and the circuitry defines patched paths each lining on the rear input ports to one the front output ports and one of the rear output ports to one of the front input ports (see Figures 1-9 and Columns 4-7). While Pfeiffer et al. does not specifically describe two input ports and two output ports on the rear face, Pfeiffer et al. does describe a double density module (200) that would inherently have such added ports.

6. Pfeiffer et al. does not describe a second monitor port on the front face. However, at the time of invention, it would have been obvious to one of ordinary skill in the art to use a second monitor port, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The motivation would have been to allow for monitoring of the separate circuits of Pfeiffer et al. to be monitored by different external components or systems.

7. Pfeiffer et al. does not describe two switches on the front face of the module. Jennings et al. describes a switch (66) on the front face of a module to operate circuitry to switch between optical paths. Pfeiffer et al. and Jennings et al. are analogous art from the same field of optical module design. At the time of invention, it would have been obvious to one of ordinary skill in the art to use switches like that of Jennings to control the optical circuits in the module of

Art Unit: 2874

Pfeiffer et al. The motivation for doing so would have been to allow for external manual control of the optical circuitry described by Pfeiffer et al. Therefore, it would have been obvious to one of ordinary skill in the art to combine Jennings et al. with Pfeiffer et al. to obtain the invention as presently claimed.

8. Regarding Claims 2 and 3, Pfeiffer et al. further describes a cable management system for managing cables connected to the front face. While Pfeiffer et al. does not specifically describe the rear face having such a cable management system, it would have been obvious to one of ordinary skill in the art to use such a system on the rear face, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

9. Regarding Claim 4, while Pfeiffer et al. does not describe the visual indicators as LED's, it appears that the indicators shown have the structure of LED's.

10. Regarding Claim 5, Jennings describes the switch as a toggle switch (66).

11. Regarding Claim 6, Pfeiffer et al. further describes the ports as fiber optical adapters (106, 110).

12. Regarding Claim 7, Pfeiffer et al. further describes the ports having openings (80) for fiber pigtails.

13. Regarding Claim 8, Pfeiffer et al. further describes the circuitry 2x2 optical switches (see Column 5).

14. Regarding Claim 9, Pfeiffer et al. describes a fiber optic connection panel having a chassis (70) and a plurality of circuit modules (10) mounted in the chassis having an input port (110b) positioned on a rear face (94), an output port (110a) positioned on the rear face, an input

Art Unit: 2874

port (106a, 106d) positioned on a front face (92), an output port (106b, 106e) positioned on the front face, a monitor port (106c) positioned on the front face, and a power input connector (202) on the rear face. Pfeiffer et al. describes each module having circuitry linking the input and output ports on the rear face to each other and to the output ports on the front face, where two normal through paths each link on the rear input ports to one of the rear outputs and the circuitry defines patched paths each lining on the rear input ports to one the front output ports and one of the rear output ports to one of the front input ports (see Figures 1-9 and Columns 4-7).

15. Pfeiffer et al. does not describe a switch on the front face of the module. Jennings et al. describes a switch (66) on the front face of a module to operate circuitry to switch between optical paths. Pfeiffer et al. and Jennings et al. are analogous art from the same field of optical module design. At the time of invention, it would have been obvious to one of ordinary skill in the art to use switches like that of Jennings to control the optical circuits in the module of Pfeiffer et al. The motivation for doing so would have been to allow for external manual control of the optical circuitry described by Pfeiffer et al. Therefore, it would have been obvious to one of ordinary skill in the art to combine Jennings et al. with Pfeiffer et al. to obtain the invention as presently claimed.

16. Regarding Claims 10 and 11, Pfeiffer et al. further describes a cable management system for managing cables connected to the front face. While Pfeiffer et al. does not specifically describe the rear face having such a cable management system, it would have been obvious to one of ordinary skill in the art to use such a system on the rear face, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

Art Unit: 2874

17. Regarding Claim 12, describes visual indicators (at right end in Figure 7). While Pfeiffer et al. does not describe the visual indicators as LED's, it appears that the indicators shown have the structure of LED's.

18. Regarding Claim 13, Jennings describes the switch as a toggle switch (66).

19. Regarding Claim 14, Pfeiffer et al. further describes the ports as fiber optical adapters (106, 110).

20. Regarding Claim 15, Pfeiffer et al. further describes the ports having openings (80) for fiber pigtails.

21. Regarding Claim 16, Pfeiffer et al. further describes the circuitry 2x2 optical switches (see Column 5).

22. Regarding Claim 17, Pfeiffer et al. describes a fiber optic module having a module housing (70) with an input port (110b) positioned on a rear face (94), an output port (110a) positioned on the rear face, two input ports (106a, 106d) positioned on a front face (92), two output ports (106b, 106e) positioned on the front face, a monitor port (106c) positioned on the front face, and a power input connector (202) on the rear face. Pfeiffer et al. describes each module having circuitry linking the input and output ports on the rear face to each other and to the output ports on the front face, where two normal through paths each link on the rear input ports to one of the rear outputs and the circuitry defines patched paths each lining on the rear input ports to one the front output ports and one of the rear output ports to one of the front input ports (see Figures 1-9 and Columns 4-7). While Pfeiffer et al. does not specifically describe two input ports and two output ports on the rear face, Pfeiffer et al. does describe a double density module (200) that would inherently have such added ports.

Art Unit: 2874

23. Pfeiffer et al. does not describe a second monitor port on the front face. However, at the time of invention, it would have been obvious to one of ordinary skill in the art to use a second monitor port, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The motivation would have been to allow for monitoring of the separate circuits of Pfeiffer et al. to be monitored by different external components or systems.

24. Pfeiffer et al. does not describe two switches on the front face of the module. Jennings et al. describes a switch (66) on the front face of a module to operate circuitry to switch between optical paths. Pfeiffer et al. and Jennings et al. are analogous art from the same field of optical module design. At the time of invention, it would have been obvious to one of ordinary skill in the art to use switches like that of Jennings to control the optical circuits in the module of Pfeiffer et al. The motivation for doing so would have been to allow for external manual control of the optical circuitry described by Pfeiffer et al. Therefore, it would have been obvious to one of ordinary skill in the art to combine Jennings et al. with Pfeiffer et al. to obtain the invention as presently claimed.

25. Regarding Claim 18, Pfeiffer et al. further describes two visual indicators (at right end in Figure 7) positioned on the front face to indicate the state of the circuitry.

26. Regarding Claim 19, Pfeiffer et al. further describes the module having a flange (114) extending from the module housing for receipt of a fastener for mounting the module housing into a chassis.

Response to Arguments

27. Applicant's arguments, filed May 22, 2006, with respect to the rejection(s) of claim(s) 1-19 in view of US Patents Nos. 6,556,738 to Pfeiffer et al. and 6,263,136 to Jennings et al. have been fully considered.

28. Applicant's correctly argues that the system of Pfeiffer et al. does not inherently include a second monitor port. Please note, however the new rejection of Claims 1 and 17 discussing the obvious modification to include a second monitor port to the system of Pfeiffer et al. (see paragraphs 6 and 23 of this Office Action). Please note that this rejection is not final.

29. Applicant also argues that it would not have been obvious to modify the system of Pfeiffer et al. to include the switch setup of Jennings et al. This argument is not persuasive. While the Applicant is correct that including manual switches in the system of Pfeiffer et al. would be redundant in light of the remote control abilities of the Pfeiffer et al. system, the examiner notes that such redundancy may be quite beneficial, especially where a manual operator in a position to observe the system operation in a manner different from a remote operator.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry T. Rahll whose telephone number is (571) 272-2356. The examiner can normally be reached on M-Th (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2874

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jerry T Rahll



SUNG PAK
PRIMARY EXAMINER